

Inventions & Innovation Emerging Technology

Nickel-Based Superalloy with Improved Weldability and Oxidation Resistance

Testing of a new nickel-based superalloy has been completed. Oxidation resistance was shown to be equivalent to current-generation single crystal alloys, and weldability was determined to be excellent without the need for preheating. The alloy derives its properties by the addition of palladium, which enhances high-temperature oxidation resistance and allows for a reduction in aluminum that directly results in improved weldability.



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